set out in the charter or the adapted American questionnaire they used cover the concerns of British patients.

It would be surprising if the satisfaction and views of diverse types of patients could be covered adequately by a general questionnaire. Bruster and colleagues' conclusion that many of the problems related to communication is not surprising since at least 21 of the 35 direct questions listed in table II are about communication, although they purport to be about other aspects of care. Among the questions on satisfaction, the patients were asked about the helpfulness and courtesy of staff, but we should expect more than this from health professionals. No questions were asked about practical aspects of care (for example, help with going to the toilet) or more intangible but equally important aspects of care, such as reassurance. Surprisingly, patients were not asked their views on the outcome of their treatment, a long recognised flaw in research into satisfaction among patients[2] and a major omission if the investigators really do regard patients as "expert witnesses in the care process."

Ensuring the validity of a questionnaire seeking to establish patients' satisfaction is vital if some of the problems the investigators refer to (for example, focus on easily measured items, hotel aspects of care) are not to be repeated, in this case on a grand scale. Methods of finding out what concerns patients are well developed and include the use of in depth interviewing and content analysis[3] as a prelude to designing questionnaires for larger scale use. In stroke care we have developed questionnaires to establish patients' and carers' satisfaction that cover concerns identified only from careful, in depth interviewing.[4,5] Despite the large scale of Bruster and colleagues' survey we urge against its findings or methods being used as a gold standard.

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Authors' reply

EDITOR,—Pandora Pound and Shah Ebrahim suggest that patients are asked about their satisfaction in order to achieve greater responsiveness to their needs. One of the outcomes of our survey was that asking about satisfaction produces little useful information. Asking about patients' experiences, however, can help to improve standards of care. In our paper the results of the questions concerning satisfaction were shown simply to illustrate that answers to these types of questions are positive despite the obvious problems reported in questions related to patients' actual experiences.

Pound and Ebrahim's interpretation that we took a limited view of patients' satisfaction is, we think, due to a misunderstanding. The paper certainly focused on the standards set out in the patient's charter and national charter. We chose to highlight these as we thought that they would be of interest to a general readership, particularly as no national data had been published on them since the patient's charter was first published. The survey, however, had a much broader scope than was reported in the paper. With a limit of 2000 words it is impossible to cover all aspects of the survey. In the paper we described 75 of the 221 questions that were asked, so about two thirds of the results were not reported. We hope to publish more specific results in the future on the management of pain, planning of discharges, communication, and nursing implications of the survey—and these will illustrate the practical aspects of the survey, which included questions on help with using the toilet, bathing, and eating and questions relating to the reassurance of patients.

A considerable amount of qualitative work, including focus groups with patients, was used in designing the questionnaire. The number of problems reported by patients in this survey suggests that most of the questions we asked concerned topics of real concern to them. In addition, answers to open ended questions in the survey did not highlight any major concerns that were not addressed directly in the questionnaire.

Regarding the gold standard, we indicated that the survey was a national one, with over 5000 randomly selected patients interviewed face to face and with an 86% response rate, which could be used as a national reference dataset.

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Non-immunisation of children

Statistics on vaccination coverage may be a poor measure of practice performance

EDITOR,—Neil Simpson and colleagues cite homoeopathic and religious reasons for the non-immunisation of children.[1] My experience of inner city practice, however, is that repeated failure to respond to requests for vaccination, without active refusal, is also an important reason for "negative consent." The fact that in 40% of cases in Simpson and colleagues' study the parents did not respond or gave no clear reason for non-vaccination or the children were having delayed vaccinations is consistent with this.

I compared the experience of an inner city practice in giving the preschool booster to its target cohort with that of a suburban practice in Leicester for the quarter ending September 1994. I did this by examining the medical records and vaccination returns to the health authority. These cohorts were typical of the respective practices. The two practices are similar in their accessibility, the vaccination clinics offered, the method of calling children, and the enthusiasm for vaccination, but their experience differs considerably. When the cumulative percentage vaccination coverage after successive call ups is compared the inner city practice is at a disadvantage because its population is less compliant (table). Not only does a lower proportion respond but those who do respond require more call ups, showing resistance to vaccination rather than refusal.

Among the children who remained unvaccinated active refusal was not a major problem (one child from the inner city practice) but poor compliance was. This manifested as persistent failure to attend (five children) or having had late primary courses (eight children), which delayed call up until after the cohort had been assessed for target payment. Unlike the suburban practice, the inner city practice found it essential to do home visits to achieve the top target. Four of the cohort were vaccinated in this way, but seven visits were necessary as patients were frequently out. In our experience most of the parents who regularly fail to bring children for vaccination are compliant with "on the spot" vaccination; this is consistent with findings elsewhere.[2]

The reasons for a poor response are complex but are probably partly related to increased mobility (3·5% of the suburban cohort compared with 13·5% of the inner city cohort joined the practices after the age of 3½). Employment status, receipt of social security benefits, single parenthood, immigration, and poor English have been identified as factors.[2,3]

There is a role for health visitors in performing on the spot vaccination. Consideration should be given to including children in whom primary courses have been late in later cohorts to increase their chance of vaccination. Poor compliance greatly increases the effort required to reach top targets. It is clear that the value of statistics on vaccination coverage alone as a measure of practices' performance is doubtful.

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1 Simpson N, Lenton S, Randall R. Parental refusal to have children immunised: extent and reasons. *BMJ* 1995;310:227. (28 January.)
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Vaccination coverage after successive call ups in suburban and inner city practices

	Suburban practice (n=142)		Inner city practice (n=168)	
	No vaccinated	Cumulative response (%)	No vaccinated	Cumulative response (%)
Attendance data available:				
1st Call	106	77·4	84	61·3
2nd Call	25	95·6	24	78·8
3rd Call	3	97·8	13	88·3
4th Call	2	99·3	6	92·7
7th Call	0	99·3	1	93·4
No response	1		9	
Attendance data unavailable:				
Joined practice after first call for prechool booster*	5		23	
Vaccinated urgently as was near end of quarter	0		5	
Not called because of late primary course	0		3	
No unvaccinated	1		17	

*The vaccination coverage of these children is worse than that for each cohort overall, implying that these children do not bias the attendance data that are available.

The Society of Homoeopaths has no official policy on vaccination

EDITOR,—I wish to correct misleading information concerning the Society of Homoeopaths given in Neil Simpson and colleagues' paper on parental refusal to have children immunised.[1] The society

does not have an official policy on vaccination but considers it important that concerned parents should have access to full information on efficacy and adverse effects so that they can make an informed decision. A detailed search of the many papers published on this subject yields many short term studies but few comparing vaccinated and non-vaccinated populations over the longer term, such as that reported by Odent *et al.*[2]

The society receives many requests for information on vaccination from members of the public. The article by Moskowitz, an American paediatrician, cited by Simpson and colleagues is one of several listed in a leaflet published recently by the society in response to these requests.[3] Among others listed are a booklet published by the Anthroposophical Medical Association[4] and the Department of Health's *Immunisation against Infectious Disease.*[5] Copies of the leaflet and the bibliography from which the references were selected may be obtained from the Society of Homoeopaths.

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Book dispelling immunisation myths is available

EDITOR,—Neil Simpson and colleagues report that the rate of non-immunisation among children in their area is 0·33% and describe the reasons why some parents refused immunisation.[1] We wish to describe the situation in New Zealand.

Until recently the childhood immunisation rate in New Zealand was thought to be low relative to that in many other developed countries (New Zealand does not have a national immunisation register to give accurate overall figures). A small study in 1992 showed that less than 60% of children had received the immunisations appropriate for their age by 2 years of age and that 4·2% of parents believed that immunisations were unnecessary if children were healthy.[2] More recently, the rate of completed immunisation has been shown to have risen to around 80% by 2 years of age.[3]

Many local health professionals believe incorrectly that the childhood immunisation rate is appreciably affected by a sizeable lobby against immunisation. Although members of this lobby claim not to be against immunisation but, rather, to be in favour of giving parents information so that they can make an informed choice, virtually all their literature is against immunistion. At the age of 6 months, however, only 0·5% of infants in New Zealand's largest national childhood cohort study, of 4000 infants, had not been immunised because their parents were against immunisation.[4]

The flood of letters in the media suggests that some anti-immunisation groups have a disproportionately high profile, but we should not overestimate the size of their lobby. Conversely, we should not underestimate the pernicious effect of their specious arguments. We agree with Simpson and colleagues that health professionals should provide consistent, accurate, and up to date advice on immunisation. This in turn means that they must be given clear and readable information by the appropriate authorities. We have trawled the anti-immunisation literature and written a small book, with references, that attempts to answer the arguments, myths, and misinformation that health professionals are likely to meet.[5] This has been distributed to general practitioners, practice nurses, and Plunket nurses (equivalent to health visitors) in New Zealand (available in Britain from Dr C Essex, c/o 35 St Leonard's Court, Alfred Street, Lancaster LA1 1FD; price £2.50 (cheques should be made payable to C Essex)). We have found that many health professionals and parents have been helped by finding answers or explanations to specific claims made by the anti-immunisation lobby.

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Measles and rubella immunisation

EDITOR,—The chief medical officer has stated that the recent measles and rubella immunisation campaign has been a success. Unfortunately, practices have been unable to record these immunisations systematically since no code has been issued for the Read 4 coding system, which most general practice systems use. Therefore, when patients move to another practice in the future there is a high chance that these data will not follow them. This information is important, particularly for rubella immunisation.

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Drug resistant tuberculosis

EDITOR,—P D O Davies highlights concern about drug resistant *Mycobacterium tuberculosis* and proposes a central laboratory for fast tracking molecular diagnostic tests for patients at risk.[1] The concern is shared by many, including the Public Health Laboratory Service, but Davies shows a lack of knowledge of the facilities available and the status of diagnostic methods that use the polymerase chain reaction.

The Public Health Laboratory Service Mycobacterium Reference Unit (currently in Cardiff) has provided a central focus of skill for many years and supports the diagnosis, treatment, and epidemiological monitoring of tuberculosis throughout England and Wales. The Mycobacterium Reference Unit, the network of Public Health Laboratory Service regional tuberculosis centres, and the Communicable Disease Surveillance Centre provide the backbone of the countries' laboratory and epidemiology services for mycobacteriology. It is true that most investigations for *M tuberculosis* are still based on culture, although methods such as the BACTEC system for early detection of growth have reduced the traditional delays of such culture. The molecular approaches that Davies refers to offer exciting possibilities of more rapid primary detection and determination of drug resistance. They are not, however, ready for routine use and still need research and development, which is a high priority of the Public Health Laboratory Service.

Recognising the re-emergence of tuberculosis as a serious public health problem, the Public Health Laboratory Service initiated a review of its mycobacteriology services in 1991. As a result, the Mycobacterium Reference Unit will move to new facilities at Dulwich Public Health Laboratory/King's College Hospital this year and the post of director has been advertised. One principal area for development will be molecular approaches to diagnosis. The network of regional tuberculosis centres has also been streamlined, with Cardiff, Birmingham, and Newcastle Public Health Laboratories and the Dulwich Mycobacterium Reference Unit serving the south west and Wales, the midlands, the north, and the south east respectively. Molecular typing by restriction fragment length polymorphism has also been pioneered by the Central Public Health Laboratory, which, with the Communicable Disease Surveillance Centre, is using it to study the epidemiology of *M tuberculosis.*

It is disappointing that Davies does not recognise the priority that the Public Health Laboratory Service gives to mycobacteriology services. The laboratories that Davies desires already exist and will offer the methods Davies commends as soon as they become sufficiently reliable for routine application.

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Asthma care in general practice

EDITOR,—Simon A Evans and colleagues surveyed general practitioners in the North West Regional Health Authority and used the drugs and equipment they carried as surrogate measures of their preparedness to manage acute severe asthma.[1] In early 1994 we repeated a study originally performed in 1989[2] to assess the change in use of peak flow measurements by general practitioners in Northern Ireland. Two questionnaire items are of interest, one asking whether general practitioners had a nebuliser available in their practice and the other asking whether they usually carried a peak flow meter on house calls.

The original study population was a 1 in 4 random sample of general practitioners in Northern Ireland. The same practitioners were surveyed in 1994, with replacements for those who had left the list being drawn randomly from doctors still practising at the same address. Of 232 doctors, 199 (86%) and 192 (83%) responded in 1989 and 1994 respectively. In 1994, 157 respondents were male and 173 were working full time. A maximum of 176 pairs of responses was possible, of which 84% were obtained. The table shows the proportions of general practitioners who had a nebuliser in their practice and took peak flow meters on house calls together with the change in behaviour of the general practitioners for whom paired responses were available. It is apparent that, in Northern Ireland, nebulisers are almost universally available in practices yet the proportion of general practitioners who carry peak flow meters on house calls is low and unchanged.